UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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T: Recurring Problems in State UIC Applications

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TO: **Water Division Directors, I-X**
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In a recent (January 22, 1982) memorandum to you, I suggested certain procedural changes in our process for reviewing State applications for the Underground Injection Control (UIC) program. The purpose of those changes is to streamline the Agency's review process, in light of our experience to date, to assure that we can act on State applications within the statutory 90-day period.

My earlier memorandum pointed out that the major stumbling-block in processing State applications within the 90-day period has been the need to negotiate solutions to certain recurring problems with the States during the formal review period. Therefore, I urged you and your staff to work closely with the States to assure that State applications are in good shape before they are formally submitted to us as final.

The purpose of this memorandum is to outline for you the major recurring problems we have encountered in our review of both draft and final applications so far. You should be especially alert to these concerns as you work with your States or review draft applications.

To assist you in resolving such problems, we have also included some examples of acceptable solutions we have been able to develop in the State programs reviewed to date. Some of the requirements for an approvable State program are spelled out in the Safe Drinking Water Act (Act) itself, and on these questions there is relatively little scope for administrative interpretation. For example, the State must be able to prohibit injections which are not authorized under its UIC programs. In other cases, however, there is greater latitude for deciding whether a State program "meets the requirements" of the Act or of the Federal regulations. Section 1425 clearly gives the States greater flexibility to make a successful demonstration than Section 1422, although the States are still expected to make a meaningful demonstration under Section 1425.

The recommended solution in a number of cases is to add an appropriate section to the Memorandum of Agreement (MOA) between EPA and the State. There are two considerations with regard to such a solution. First, when the enabling statute clearly grants the State Director the discretion to define and implement a requirement, it is generally acceptable for the Director to make a commitment to us to exercise that discretion in a certain way. However, where the discretion of the Director is not clear, it is necessary to obtain certification in the Attorney General's Statement that the Director's commitment to exercise his discretion in a certain way is legal and enforceable. The second consideration is that the addition of a section in the MOA may in fact result in a requirement on injection well operators who may not have had the opportunity to comment on that requirement. This could conceivably make the solution vulnerable to challenge at a future date.

For these reasons, the ideal cure for problems in a State's program is to amend its enabling statute or regulations, as appropriate. Since this may not be possible in some cases, we recommend commitments in the MOA as a possible alternative.

1. Inadequate Statutory Authority

This problem has arisen so far in a variety of ways.

1a. Authority over Indian Lands. The Act specifies that it does not intend to change the status of any Indian lands. The UIC regulations, therefore, assume that implementation on Indian lands is a Federal responsibility unless: (1) the State chooses to assert jurisdiction; and (2) the State demonstrates that it has the necessary authority.

Most applications we have reviewed so far were silent on this question. The State should be requested to say explicitly whether it chooses to assert jurisdiction or not, and if it so chooses, specifically over which lands it is asserting jurisdiction.

States which have so far asserted jurisdiction over Indian lands seem to rely on the fact that they have regulated on such lands for years. The mere fact that a State has regulated on Indian lands in the past is not by itself an acceptable demonstration of its legal authority to do so.

At a minimum, the application should include an explicit discussion in the Attorney General's (AG's) statement explaining the basis for the State's claim to authority.

Furthermore, the Office of General Counsel has decided that while EPA will accept the AG's opinion in matters of State law, EPA will independently review the basis of the AG's opinion in matters involving Federal law, e.g., State authority on Indian lands. Therefore, the application must include treaties or Federal statutes which grant the States such authority and the text of opinions in any court cases in which the State authority in this regard was tested. The legal status of Indian lands within a State is not necessarily uniform. For example, Oklahoma successfully demonstrated its legal authority over some Indian lands within the State but not over others.

In those cases when EPA is to prescribe and implement an UIC program on Indian lands, you are encouraged to negotiate an MOU with the State, or possibly the Indian tribe, to share the responsibility. EPA must retain the responsibility for issuing the permit and for enforcement. Virtually all other functions (permit preparation, inspection, surveillance, etc.), can be performed by the State. Region VI is now developing such an agreement with Oklahoma.

1b. Authority on Federal Lands and Over Federal Facilities. State authority to implement the UIC program on Federal lands and over Federal agencies and facilities is explicitly required by Section 1421(b)(1)(D) of the Act. Therefore, the State has little choice but to demonstrate that it has such authority and that it will act on it.

The matter is easier with regard to the State's authority over Federal agencies and facilities. While the SDWA subjects them to regulation by the States, the States must still take affirmative action to claim such authority. This can most easily be done by assuring that a State's definition of "person" or "owner or operator" in its enabling legislation explicitly includes officers and/or agencies of the Federal government. However, many State definitions do not contain such a specific inclusion. In such cases, a certification by the AG is acceptable if the State definition is broad enough and does not specifically exclude Federal agencies or facilities.

The matter is somewhat more complicated with regard to a State's authority on Federal lands. First of all, the AG's Statement should include an explicit finding that the State does have the authority to apply its UIC program on Federal lands. Furthermore, because the U.S. Geological Survey (USGS) does regulate at least some classes of wells on Federal lands, the program description should include a section which describes in some detail how the State's regulatory activities are conducted in relationship to any USGS regulatory activities.

We are currently discussing the coordination of Class II programs in primacy States with the USGS. However, we are continuing to approve Class II applications and do not propose to hold up our review pending the outcome of these discussions.

1c. Waste and Correlative Rights. The enabling statute of several States, for example, in the West and Southwest, grants the oil and gas regulatory agency the authority to "minimize waste and protect correlative rights" or a similar authority. In some statutes, the term "waste" is defined in a narrow manner that relates almost exclusively to the conservation of oil and gas. In other cases the term may not be defined in the statute or may explicitly include natural resources or even "waters of the State." Some statutes also have a purpose or policy section which declares that the mission of the State agency is to assure the orderly and efficient development of oil and gas resources.

The concern over such formulations of statutory authority is whether the narrower or more ambiguous versions in fact provide the State agency with sufficient authority to "prohibit underground injection which endangers drinking water sources" (Section 1421(b)(1). Can the State agency, for example, legally impose permit conditions designed to protect underground sources of drinking water (USDWs)? Does the State have the authority to order a well to be shut in or sever a pipeline connection because the well may be a source of environmental concern?

Ideally, a State's enabling statute should explicitly authorize the regulatory agency to protect USDWs, since even Section 1425 requires the State program to meet the requirements of Section 1421(b)(1). However, it simply may be impossible to amend the State's oil and gas act.

When a State's oil and gas law does not provide an explicit authorization to protect USDWs, the Sate can still make a satisfactory showing if that authority is explicitly asserted in its regulations and if the legality of the regulations is supported by the AG's Statement. The AG's finding may define references in the enabling statute (e.g., the protection of "natural resources") or rely on court cases as upholding the State's claim to such authority.

2. Fresh Water

As you know, the Federal regulations define USDWs explicitly (§122.3 as amended). A number of State programs we have reviewed authorize the State agency to protect the "waters of the State" or "fresh water" or the "beneficial uses of water." The problem with such terms is that they leave a

great deal of discretion to the State agency to define the resource to be protected by the UIC program and that such definitions may result in an UIC program that offers a lesser degree of protection than that required by the Federal regulations. For a State program to be approvable, such general definitions must be tied explicitly to the definition of USDW in the regulations. This may be done in a variety of ways.

First, the State can amend either its underlying statute or the applicable regulations to provide for a definition of fresh water or waters of the State that is at least as protective as the Federal definition of USDW. Second, in some cases (for example, New Mexico) the definition of such terms is by statute assigned to a State agency (such as the State engineer or the water quality agency). In such cases, the definition can and should be changed administratively in order to make the program approvable. Third, in cases where the definition of "fresh water" is broad, and changes in the statute or regulations are infeasible, the State can agree in the MOA to use a definition of USDW that is at least as protective as the Federal one. The AG should certify the legality of such a solution.

3. Aquifer Exemption.

State UIC programs under the SDWA become effective on the day they are approved by the Administrator. From the time they become effective, complete or partial State programs must prohibit injections which are not authorized under the program. In other words, as of the effective date of the State UIC program, every injection well covered by the program must have some kind of legal status recognized in the State program. There are limitations on the ability to grant such legal status, for example, the State may not authorize injections which endanger USDWs.

A central presumption of the Federal regulatory approach is that direct injection into an USDW constitutes endangerment. Consequently, Class I wells must, by definition, inject below USDWs. Class IV wells may inject into USDWs (when authorized by rule) only for the short span of time it may take to close them or if they are injecting into an USDW that has been exempted. Class V wells, for example aquifer recharge, are the major exception to this presumption, but their impact on USDWs is one of the major questions to be determined by the States' assessment.

The presumption also applies to Class II and III wells. Many of the technical requirements included in Part 146 or the Section 1425 Guidance are to prevent the migration of fluids into USDWs. Nevertheless, the UIC program does

recognize that Class II and III wells must inject into the intervals where the hydrocarbon or mineral resources are to be found, and that these intervals may contain aquifers which meet the definition of an USDW. Section 146.04 provides for the possibility of exempting a USDW on the ground that it is hydrocarbon or mineral producing in order to allow the State (or EPA) to authorize legally the continued operation of Class II and III wells injecting into USDWs if it chooses to do so.

So far, only one State application we have reviewed included included aquifer exemptions. Our concern is that aquifer which meet the definition of USDWs are now USDWs by virtue of §122.31(d). Therefore, Class II and III wells which now inject into an aquifer which meet the definition of an USDW would have to be prohibited on the day the State program is approved. If the State chooses to allow the continued operation of such wells, it must provide a legal status for them by exempting the appropriate aquifer portions from protection in accordance with §146.04.

Regions should make an effort to determine whether the applying State has any injection wells which now inject into USDWs. If so, the State should be informed that the Federal standards normally would prohibit such wells. If the State wishes to allow the continued operation of any of these wells, it must include exemptions for appropriate aquifer portions in its program application.

4. Adequate Protection

The basic approach of the UIC regulations is to establish technical requirements for the siting, construction, operation and closure of wells which in most cases are designed to prevent the movement of injected or native fluids into USDWs. During the development of the regulations, we considered and rejected other regulatory approaches that would have prevented the introduction into the USDW of contaminants in harmful quantities or allowed injection as long as it did not result in adverse effects on the health of persons at a point of use. We reached the conclusion that these other approaches would be cumbersome and possibly more expensive to use in the long run. Such approaches would have to define what an "adverse effect on the health of persons" was for the variety of fluids that are injected through wells. Furthermore, such regulatory approaches could involve extensive monitoring of ambient aquifer quality. Finally, they would, at least in some cases, require complicated modelling to predict the effect of an injection on ground water quality at a potential point of use.

The revised regulations change §122.34 but leave undisturbed most of the technical requirements in Part 146 (for example, wells must still be cased and cemented and injection pressure must be controlled so as to prevent the movement of fluids into USDWs).

The programs submitted by a number of States so far have technical requirements for injection which "provide an adequate protection to fresh water" or "prevent harmful contamination" or "protect the beneficial uses of ground water." Such regulatory standards depart from the UIC regulations and would, for the reasons discussed above, be difficult to implement. Therefore, to become approvable, a State program must, in some fashion, conform with the technical requirements of Part 146. This statement, of course, does not apply to the same extent to programs submitted under Section 1425 since such applications do not have to demonstrate conformance with our regulations, only that they are "effective." However, even under Section 1425, a program will have to go beyond a requirement of "no harmful contamination" since we are not fully persuaded that such a standard is really clear or effective.

States can cure this problem by amending either their enabling statute or their applicable regulations in appropriate ways. This would be the preferrable solution. We have also accepted a section in the MOA in which the State agrees to interpret its broad standard and to apply it in conformance with our regulations, as long as it is supported by the AG's statement.

5. Variances.

In a number of cases State regulations which are otherwise approvable grant broad discretion to the State agency to authorize injection wells without regard to the regulations. Such exemptions may be specific, for example, to grant permits under certain circumstances without procedural safe-guards or to ease casing depth requirements under certain circumstances. They can, however, also allow the State agency to authorize certain kinds of injection practices not withstanding any other requirement of the regulations. Such provisions undermine the ability of a State to demonstrate the effectiveness of its program, since they may allow the State to authorize injections without regard to the very safeguards we are approving as effective in protecting USDWs.

One solution to this problem is obviously for the State to amend its regulations to eliminate them. Where amendment of State regulations is infeasible, the program description should offer a full description of the circumstances under

which the State expects to use these variances or exemptions. Furthermore, the Memorandum of Agreement with EPA should include a section covering such variances. This section should describe the limits under which the discretion granted in these State regulatory sections will be exercised by the State agency. It should assure that variances will not be used to authorize injections which endanger or to render the State program less protective than the Federal regulations. Furthermore, it should outline additional appropriate safeguards, for example, monitoring, that the State may require in cases where it authorizes injection wells under these provisions.

6. Permits

6a. Authorizing Instruments. A number of State programs seem to use a variety of instruments for authorizing injection wells. These may be called approvals of applications, orders, administrative orders, permits, rules and other things. The program description should provide sufficient detail for us to understand what the legal differences, if any, among these various instruments are; what situations they will be used in; and whether all of them retain the burden on the applicant for making the requisite demonstration of non-endangerment. The program description should also make clear what the duties of the permittee are under the various instruments and the extent to which the State agency can condition such authorizations with regard to such standard conditions as the duty to halt, the duty to mitigate, the transfer of permits, etc.

6b. Public Participation. So far, we have encountered problems in State applications with respect to two aspects of the public participation requirements. One of these is the definition of "interested parties" and the other is the method for giving public notice.

In cases where neither the State's enabling statute nor its regulations define the term "interested parties," the State agency presumably has the discretion to do so. However, in a number of instances, especially with respect to oil and gas production, statutes or regulations restrict the persons who have standing, for example, to adjacent owners of surface or mineral rights.

In general, the thrust of Federal requirements regarding public participation has been to assure the access of the public at large, not only certain elements of it. Therefore, both the Part 124 regulations and Section 5.6(e) of the Section 1425 Guidance specify that notice of permitting actions be given not only to "interested parties" but also to the general public at least in the area of the proposed injection well. Similarly, the general public

should be assured the opportunity to comment. With regard to requests for public hearings, however, both Part 124 and the Section 1425 Guidance grant the Director the discretion to decide when to hold a public hearing based on his judgment of whether there is a significant degree of public interest. Implicit in this discretion is the latitude to consider the source of the requests to hold a hearing.

The other problem we have encountered relates to the method of giving notice. In a number of States, the applicant is required to give notice to adjacent land or mineral-rights owners. For applications under Section 1422, 40 CFR 124.10 (c) specifies that public notice shall be given by:

- mailing the notice to the applicant;
- mailing the notice to any Federal or State agency involved in permitting the applicant;
- mailing the notice to any Federal or State environmental agencies (e.g., State Historic Preservation Officers);
- mailing to persons on a mailing list;
- other methods constituting legal notice in the State;
- any other method calculated to give notice to affected persons; and
- for major (Class I) permits, publication in a newspaper.

The Section 1425 Guidance suggests (§5.6(e)) a method "adequate to bring the matter to the attention of interested parties and, in particular, the public in the area of the proposed injection." The actual method may be one or more of the following, provided it is effective:

- posting;
- publication in an official State register;
- publication in a local newspaper;
- mailing to a prepared mailing list; or
- any other effective method.

Solutions to such problems may involve amendments to the State's statute or regulations if these sections are written in a particularly restrictive fashion. More often, such sections do not preclude the State agency from informing or

allowing the participation of additional elements of the public. Thus, problems with respect to public participation can normally be solved through the addition of appropriate sections to the MOA in which the State commits to taking the additional measures necessary to assure the adequate participation of the public.

7. Class V

Apparently a number of States and possibly some Regions have interpreted the requirements for Class V under the regulations to be essentially an assessment program. It is important to remember that an approvable Class V program must contain: (1) requirements for completing an inventory; (2) plans for a study and assessment of the Class V practices in the State; (3) a commitment to make recommendations to EPA for possible further regulatory requirements; and (4) the authority to take action if a Class V is creating problems. The authority to take action may involve one or more of the following things (122.34(c)): (1) to require the well operator to obtain a permit; (2) to order remedial action; or (3) to take enforcement action.

If the State offers permits as the means for controlling Class V problems, it should demonstrate a potential permit process in conformance to the one that applies to Class I (see Preamble discussion of §122.34, 45 FR 33330). In any case, the State will have to demonstrate that its authority over Class V practices meets the requirements of 40 CFR 123.9 with regard to both the enforcement mechanisms and the penalty amounts.

In the case of one State, the specific enabling statute did not provide adequate enforcement authority. However, the conditions under which the State Director is to take action against Class V well operators according to 40 CFR 122.34(c) and (d) represent major public health concerns. Once the State reviewed its general authorities to protect the public health and welfare, it was able to demonstrate more than adequate enforcement authority.

In at least one case so far, we have reviewed a State submission that establishes more stringent requirements than the UIC regulations for Class V. This State will permit such injections but only if the injected fluids are no poorer than drinking water quality.

EPA will not officially review State requirements in excess of our regulations. Therefore, if a State now chooses to permit some or all of its Class V wells, other than as an enforcement mechanism under §122.34(c), its permit procedures do not have to conform to the Federal requirements (although its enforcement authorities do).

While at this time we will not review State requirements for Class V more stringent than ours, EPA's approval of a Class V program will also not constitute approval or disapproval of such requirements. This posture is based on §123.1(k)(2) which states that when an approved State program has a greater scope of coverage than required by Federal law, the additional coverage is not part of the Federally approved program. However, if and when the Federal regulations are amended for Class V, States will have to demonstrate conformance within 270 days.